

## Sample Submission Guidelines

Sample collection  
Plasma and serum sample processing  
Sample transport and storage

Proper sample collection and processing is crucial for a successful analysis. Therefore, it is strongly recommended to adhere to the sample collection and submission guidelines listed below to ensure that the samples arrive in their best condition for analysis.

### General Guidelines

- 100-200 µl sample are recommended, only plasma or serum samples can be processed.
- Check the expiration date on the sample collection tubes and do not use tubes that have expired.
- When collecting samples (plasma and/or serum), follow the collection order specified in the guidelines provided by the tube manufacturer.
- Perform all steps at room temperature. Transfer the samples to their appropriate storage temperature as soon as collection and processing is done.

### Sample Transport and Storage

- Consider all samples potentially infectious and handle accordingly.
- Exposure to elevated temperatures can negatively impact successful analysis and sample performance.
- Transport blood-derived specimens on dry ice.
- Do not mix serum and plasma samples in the same matrix rack.
- It is mandatory to send your samples in Matrix™ 0.5 mL ScrewTop Tubes in Barcoded Latch Racks. (see Fig. 1). Other tubes or loose samples without a rack cannot be processed.
- Sampling tubes are available from Procomcure Biotech GmbH upon request.

### Plasma samples

- Whole blood specimens must be collected in **EDTA blood collection tubes**.
- Do not freeze EDTA tubes after collecting whole blood.
- Do not add additives other than EDTA.
- Plasma samples do not need to clot before placing in the centrifuge.
- Process and freeze plasma samples at **-80°C within 30 minutes of collection**.

### Serum samples

- **Do not add any anticoagulant** to serum samples.
- Allow serum to clot for 60-90 min at room temperature before placing in the centrifuge.
- Process serum samples within 30 minutes of centrifugation.
- **Store serum samples at -80°C.**

### Plasma Sample Processing

- Collect whole blood specimens in **EDTA blood collections tubes**.
- Centrifuge collection tubes at room temperature.
- **Centrifuge at 2200 x g (RCF) for 15 minutes**.
- Proper separation of blood cells and plasma with the plasma layer on top must be visible after centrifugation.
- Aliquot plasma samples immediately into appropriately labeled 0.5 ml Matrix screw-top tubes and place into a matrix rack.
- Avoid disturbing the buffy coat by leaving a residual of plasma and avoid the cell layer.
- Store aliquoted samples in -80°C freezer and avoid multiple freeze-thaw cycles of plasma samples.

**Note: Processing time for plasma samples is ~ 30 minutes.**

### Serum Sample Processing

- Collect whole blood specimens in blood collections tubes without any anticoagulant.
- **Allow serum to clot for 60-90 minutes** at room temperature before transfer to the centrifuge.
- **Centrifuge at 2200 x g (RCF) for 15 minutes**.
- Proper separation of blood cells and serum with the serum layer on top must be visible after centrifugation.
- Aliquot serum samples within 30 minutes into appropriately labeled 0.5 ml Matrix screw-top tubes and place into a matrix rack.
- Aliquot only the serum layer.
- Store aliquoted samples in -80°C freezer.
- Storage at -20°C have not been evaluated for the Protein Prep Assay.
- Avoid multiple freeze-thaw cycles of serum samples.

**Note: Processing time for serum samples is ~ 30 minutes after centrifugation.**

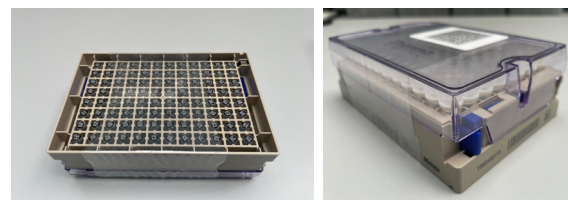


Fig. 1 Matrix™ 0.5 mL ScrewTop Tubes in Barcoded Latch Racks